



Aviation Investigation Final Report

Location:	FORT WALTON BCH, Florida	Accident Number:	MIA93LA096
Date & Time:	April 3, 1993, 11:55 Local	Registration:	N7011K
Aircraft:	PIPER PA-20	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE PILOT RELEASED A GRAPPLE HOOK IN PREPARATION OF PICKING UP A BANNER, AND DID NOT VISUALLY CHECK THE GRAPPLE HOOK AFTER DEPLOYMENT. UPON BANNER HOOK UP, THE PILOT HAD TO APPLY FULL RIGHT RUDDER TO MAINTAIN DIRECTIONAL CONTROL. THE GRAPPLE HOOK WAS ENTRANGLED AROUND THE RUDDER POST HORN. ATTEMPTS TO RELEASE THE BANNER WERE UNSUCCESSFUL. A FORCED LANDING WAS CONDUCTED TO THE BEACH. ON LANDING ROLL OUT THE AIRPLANE NOSED OVER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S FAILURE TO VISUALLY INSPECT THE GRAPPLE HOOK/CABLE AFTER DEPLOYMENT, TO ENSURE IT WAS FREE FROM ALL CONTROL SURFACES PRIOR TO INITIATING A BANNER PICKUP.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING

Findings

1. (F) SIGN TOWING EQUIPMENT - ENTANGLED
2. (C) PROCEDURES/DIRECTIVES - IMPROPER - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: MANEUVERING

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	25, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Glider	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 27, 1992
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1032 hours (Total, all aircraft), 65 hours (Total, this make and model), 900 hours (Pilot In Command, all aircraft), 183 hours (Last 90 days, all aircraft), 58 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N7011K
Model/Series:	PA-20 PA-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-117
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	December 29, 1992 Annual	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:	57 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1477 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	JETER D. BARRON	Rated Power:	150 Horsepower
Operator:	BOOMER AVIATION INC.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HRT ,12 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	12:00 Local	Direction from Accident Site:	340°
Lowest Cloud Condition:	Scattered / 15000 ft AGL	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	14°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:20 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	30.409542,-86.659416(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Carrol
Additional Participating Persons:	JERRY M YATES; BIRMINGHAM , AL
Original Publish Date:	May 17, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=33249

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).